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EXAMINER

NGUYEN, TOAN D

ART UNIT

PAPER NUMBER

2616

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/731,348

Applicant(s)

BENVENISTE, MATHILDE

Examiner

Toan D. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over He et al. (US 2004/010541) in view of Ho (US 2003/0081547).

For claim 1, He et al. disclose point coordinator control passing scheme using a scheduling information parameter set for an IEEE.802.11 wireless local area network, comprising:

(a) a plurality of access points (figure 1, reference AP2-AP5, page 3 paragraph [0027]), wherein each of said access points performs a first protocol service for a respective network (figure 12, page 4 paragraph [0034]); and

(b) a central controller (figure 2, reference GAP a) for:

(i) receiving an input signal from each of said plurality of access points (figure 2, reference b, c, and d),

and

(ii) transmitting to each of said plurality of access points an output signal based on the input signal from that access point and a second protocol service, wherein the correctness of said second protocol service is independent of said maximum timing delay (figure 11, page 3 paragraph [0033]).

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However, He et al. do not expressly disclose wherein the correctness of said first protocol service is based on a maximum timing delay. In an analogous art, Ho discloses wherein the correctness of said first protocol service is based on a maximum timing delay (page 3, paragraph [0036]).

One skilled in the art would have recognized the wherein the correctness of said first protocol service is based on a maximum timing delay, and would have applied Ho et al.'s timing of an IEEE 802.11 wireless LAN. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Ho et al.'s signaling for parameterized quality of service support in He et al.'s point coordinator control passing scheme using a scheduling information parameter set for an IEEE.802.11 wireless local area network with the motivation being to provide the maximum amount of time for a station to sense a frame, due to signal processing delay and propagation delay that is transmitted from any other station within a BSS (page 3, paragraph [0036])11-14).

For claim 2, He et al. disclose wherein said first protocol service belongs to a layer selected from the group consisting of: physical layer, and data link layer (page 1 paragraph [0004]).

For claim 3, He et al. disclose wherein said first protocol service is selected from the group consisting of: a medium access control service, an error control service, and a flow control service (page 1 paragraph [0002]).

For claim 4, He et al. disclose wherein said second protocol service is selected from the group consisting of: an authentication service, an authorization service, a traffic

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monitoring service, an admission control service, and a polling list maintenance service (page 1 paragraph [0007]).

3. Claims 5-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over He et al. (US 2004/010541) in view of Ho (US 2003/0081547) further in view of Liu et al. (US 7,209,467).

For claims 5-6, He et al. disclose said central controller (figure 2, reference GAP a).

However, He et al. in view of Ho do not expressly disclose wherein said central controller is also for:

(iii) receiving a datum via a wide-area network, and

(iv) transmitting said datum to at least one of said access points.

In an analogous art, Liu et al. disclose:

(iii) receiving a datum via a wide-area network (col. 1 line 63 to col. 2 line 6), and

(iv) transmitting said datum to at least one of said access points (col. 1 line 63 to col. 2 line 6, and col. 4 line 67 to col. col. 5 line 1).

Liu et al. disclose wherein each of said access points is also for receiving a first datum from said central controller (gateway means) and for transmitting a second datum based on said first datum to at least one station in said respective network (col. 1 line 63 to col. 2 line 6, and col. 4 line 67 to col. col. 5 line 1 as set forth in claim 6).

One skilled in the art would have recognized the receiving a datum via wide-area network, and would have applied Liu et al.'s wide area network in He et al.'s WLAN.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

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invention, to use Liu et al.'s adaptive adjustment of backoff times in wireless network communications in He et al.'s point coordinator control passing scheme using a scheduling information parameter set for an IEEE.802.11 wireless local area network with the motivation being to provide the wireless access point connects to a wide area network (WAN), such as the Internet (col. 2 lines 1-2).

For claim 7, He et al. disclose point coordinator control passing scheme using a scheduling information parameter set for an IEEE.802.11 wireless local area network, comprising:

(a) performing a first protocol service with a first access point, wherein the correctness of said first protocol service is based on a maximum timing delay (figure 12, page 4 paragraph [0034]);

(b) transmitting a first signal to a gateway (second processor means), wherein said gateway is for performing a second protocol service, and wherein the correctness of said second protocol service is independent of said maximum timing delay (figure 11, page 3 paragraph [0033]); and

(c) receiving from said second processor a second signal based on said second protocol service (figure 11, page 3 paragraph [0033]).

Ho (US 2003/0081547).

However, He et al. do not expressly disclose wherein the correctness of said first protocol service is based on a maximum timing delay, and a processor. In an analogous art, Ho discloses wherein the correctness of said first protocol service is based on a maximum timing delay (page 3, paragraph [0036]).

One skilled in the art would have recognized the wherein the correctness of said first protocol service is based on a maximum timing delay, and would have applied Ho et al.'s timing of an IEEE 802.11 wireless LAN. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Ho et al.'s signaling for parameterized quality of service support in He et al.'s point coordinator control passing scheme using a scheduling information parameter set for an IEEE.802.11 wireless local area network with the motivation being to provide the maximum amount of time for a station to sense a frame, due to signal processing delay and propagation delay that is transmitted from any other station within a BSS (page 3, paragraph [0036])11-14).

Furthermore, He et al. in view of Ho do not expressly disclose a processor. In an analogous art, Liu et al. disclose a processor (figure 5, reference 50, col.7 lines 19-20).

One skilled in the art would have recognized the processor, and would have applied Liu et al.'s wireless access point 9 in He et al.'s local access points. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Liu et al.'s adaptive adjustment of backoff times in wireless network communications in He et al.'s point coordinator control passing scheme using a scheduling information parameter set for an IEEE.802.11 wireless local area network with the motivation being to perform the appropriate conventional functions for managing the operation of wireless access point 9 (col. 7 lines 30-32).

For claim 8, He et al. disclose further comprising (d) detecting a first condition, wherein (a) is in response to (d)(figure 12, page 4 paragraph [0034]).

For claim 9, He et al. disclose wherein said first condition comprises the

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transmission of a signal over a shared-communications channel (page 3, paragraph [0029]).

For claim 10, He et al. disclose wherein said first condition comprises an idle time interval for a shared-communications channel (figure 12, page 4 paragraph [0034]).

For claim 11, He et al. disclose comprising (e) detecting a second condition, wherein (b) is in response to (e)(figure 11, page 3 paragraph [0033]).

For claim 12, He et al. disclose wherein said second condition comprises the transmission of a signal over a shared-communications channel (page 3, paragraph [0029]).

For claim 13, He et al. disclose wherein said second condition comprises an idle time interval for a shared-communications channel (figure 11, page 3 paragraph [0033]).

For claim 14, He et al. disclose comprising (d) detecting a condition, wherein (b) is in response to (d)(figure 11, page 3 paragraph [0033]).

For claim 15, He et al. disclose wherein said condition comprises the transmission of a signal over a shared-communications channel (page 3, paragraph [0029]).

For claim 16, He et al. disclose wherein said condition comprises an idle time interval for a shared-communications channel (figure 11, page 3 paragraphs [0029] and [0033]).

For claim 17, He et al. disclose wherein said first protocol service belongs to a layer selected from the group consisting of: physical layer, and data link layer (page 1 paragraph [0004]).



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For claim 18, He et al. disclose wherein said first protocol service is selected from the group consisting of: a medium access control service, an error control service, and a flow control service (page 1 paragraph [0002]).

For claim 19, He et al. disclose wherein said second protocol service is selected from the group consisting of: an authentication service, an authorization service, a traffic monitoring service, an admission control service, and a polling list maintenance service (page 1 paragraph [0007]).

4. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over He et al. (US 2004/010541) in view of Liu et al. (US 7,209,467) further in view of Balogh (US 6,870,822).

For claim 20, He et al. disclose point coordinator control passing scheme using a scheduling information parameter set for an IEEE.802.11 wireless local area network, comprising:

(a) performing a first protocol service for a network at a first access point (first processor means), wherein the correctness of said first protocol service is based on a maximum timing delay (figure 12, page 4 paragraph [0034]);

(b) performing said first protocol service for a network at a second access point (a second processor means)(figure 12, page 4 paragraph [0034]);

(c) transmitting a first signal from said first access point to a third access point (a third processor means)(figure 11, page 3 paragraph [0033]);

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(d) performing a second protocol service for said network at a third access point (third processor means), wherein the correctness of said second protocol service is independent of said maximum timing delay (figure 11, page 3 paragraph [0033]);

(e) transmitting a second signal from said third access point to said first access point (first processor means), wherein said second signal is based on said second protocol service (figure 11, page 3 paragraph [0033]);

(f) transmitting a third signal from said second access point (second processor means) to said third access point (third processor means) (page 4, paragraph [0035])

(g) performing said second protocol service for said second network at said third access point (page 4, paragraph [0035]); and

(e) transmitting a fourth signal from said third access point to said second access point, wherein said fourth signal is based on said second protocol service (page 4, paragraph [0035]).

However, He et al. do not expressly disclose wherein the correctness of said first protocol service is based on a maximum timing delay, and a processor. In an analogous art, Ho discloses wherein the correctness of said first protocol service is based on a maximum timing delay (page 3, paragraph [0036]).

One skilled in the art would have recognized the wherein the correctness of said first protocol service is based on a maximum timing delay, and would have applied Ho et al.'s timing of an IEEE 802.11 wireless LAN. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Ho et al.'s signaling for parameterized quality of service support in He et al.'s point coordinator control passing

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scheme using a scheduling information parameter set for an IEEE.802.11 wireless local area network with the motivation being to provide the maximum amount of time for a station to sense a frame, due to signal processing delay and propagation delay that is transmitted from any other station within a BSS (page 3, paragraph [0036])11-14).

He et al. in view of Ho do not expressly disclose a processor. In an analogous art, Liu et al. disclose a processor (figure 5, reference 50, col.7 lines 19-20).

One skilled in the art would have recognized the processor, and would have applied Liu et al.'s wireless access point 9 in He et al.'s local access points. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Liu et al.'s adaptive adjustment of backoff times in wireless network communications in He et al.'s point coordinator control passing scheme using a scheduling information parameter set for an IEEE.802.11 wireless local area network with the motivation being to perform the appropriate conventional functions for managing the operation of wireless access point 9 (col. 7 lines 30-32).

Furthermore, He et al. in view of Ho and Liu et al. do not expressly disclose a first network and a second network. In an analogous art, Balogh discloses a first network and a second network (col. 4 lines 4-17).

One skilled in the art would have recognized the first network and the second network, and would have applied Balogh's infrastructure networks in He et al.'s local access points. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Balogh's method and equipment for supporting mobility in a telecommunication system in He et al.'s point coordinator control passing scheme

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using a scheduling information parameter set for an IEEE.802.11 wireless local area network with the motivation being established by creating connections between access points AP1-4 and terminals MS (col. 4 lines 4-6).

For claim 21, He et al. disclose wherein said first protocol service belongs to a layer selected from the group consisting of: physical layer, and data link layer (page 1 paragraph [0004]).

For claim 22, He et al. disclose wherein said first protocol service is selected from the group consisting of: a medium access control service, an error control service, and a flow control service (page 1 paragraph [0002]).

For claim 23, He et al. disclose wherein said second protocol service is selected from the group consisting of: an authentication service, an authorization service, a traffic monitoring service, an admission control service, and a polling list maintenance service (page 1 paragraph [0007]).

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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